FERNALD CITIZENS TASK FORCE

A U.S. DEPARTMENT OF ENERGY SITE-SPECIFIC ADVISORY BOARD

Minutes from September 10, 1994 Meeting

Members Present:
John Applegate
Jim Bierer
Marvin Clawson
Lisa Crawford
Pam Dunn
Constance Fox
Guy Guckenberger
Phil Hamric, DOE
Darryl Huff
Gene Jablonowski, U.S. EPA
Graham Mitchell, Ohio EPA
Tom Rentschler
Warren Strunk
Bob Tabor
Thomas Wagner
Gene Willeke

Members Absent:
Guy Guckenberger
Jerry Monahan

Guests:
Tom Gumbly, Assistant Secretary of Environmental Management, U.S. Department of Energy
John Baublitz, Deputy Assistant Secretary, Office of Deputy Assistant Secretary for Environmental Restoration, U.S. Department of Energy
Jim Werner, Director, Office of Policy and Program Information, U.S. Department of Energy
Kim Hayes Chaney, Director of Fernald Environmental Management Project Division, U.S. Department of Energy

Task Force Staff:
Doug Sarno, consultant
Sarah Snyder
Judy Armstrong
Chris Varner
Tina Krueger
Dave Stickney

P. O. Box 544 Ross, Ohio 45061 513·648·6478

About 20 spectators, including members of the public and representatives from DOE, the Ohio Department of Health, the Agency for Toxic Substances and Disease Registry, the Hamilton County Regional Planning Commission, Fluor Daniel, FERMCO, and other state and federal agencies.

1. Approval of Minutes:

   - The draft minutes of the June 11, 1994, meeting of the Task Force were approved without amendment.

2. Remarks:

   Chair John Applegate told members that three of the summer interns will continue their work for the Task Force. He said Chris Varner will continue to support the Waste Disposition Subcommittee, Tina Krueger will monitor site integration and waste disposal issues, and Dave Stickney will provide research support, particularly for Superfund Reauthorization. He encouraged members to make use of the interns.

   Applegate also discussed the informational meetings held during the summer for the Task Force, including most recently an availability session with members of the Operable Unit 5 management team. (Operable Unit 5 is the study area at the Fernald site that is investigating cleanup of the environmental media.)

   He also reminded members of the Ohio Environmental Protection Agency meeting scheduled for September 13, 1994, on disposal cell siting criteria and waiver issues.

   Applegate also said that Jack Craig, acting director of the Fernald Environmental Management Project, would be discussing at the October Task Force meeting the impacts of budget cuts for fiscal year 1995 on Fernald activities.

   In light of the budget cuts, Applegate said he was postponing discussion about whether the Task Force wanted to go to Nevada for a joint meeting with the Nevada Citizens Advisory Board. (The Nevada Citizens Advisory Board had proposed this meeting.) Applegate added that DOE Headquarters officials had arranged for the chairs of the advisory groups at all the DOE sites to meet in October.

3. Remarks by Tom Grumbly:

DOE's Assistant Secretary for Environmental Management, Tom Grumbly, attended part of the Task Force meeting. He told Task Force members he was pleased with their progress, and he thanked them for agreeing to serve without pay on DOE's site-specific advisory board. He also told members that the environmental restoration budget for fiscal year 1995 was about $150 million less than the current fiscal year 1994 budget. He explained that increased efficiency within DOE would compensate for some of the budget shortfall, but he said that congressional leaders believed that DOE's program is too expensive.

After his brief remarks, Grumbly answered questions from Task Force members on topics including the budget and the proposed settlement in the lawsuit brought by current and former Fernald workers against DOE.

4. Status of Action Items and Initiatives:

Applegate said the Task Force still is on schedule to issue a draft report in November, adding that the October meeting would be focusing on resolving key issues initially discussed at the September meeting.

He also said that the Toolbox has been completely updated, both to include the information asked for by members at the June meeting and to reflect future use scenarios that would protect the groundwater. The soil volumes used in *FutureSite* do not include the volumes necessary to protect the Great Miami Aquifer.

5. Report of Waste Disposition Subcommittee:

Darryl Huff, chair of the Waste Disposition Subcommittee, provided an update of that group's activities. A copy of his statement (Attachment 1) and a handout on the status of waste disposition drivers/issues at Fernald (Attachment 2) are attached.

6. Review of Evaluation Criteria:

Applegate turned the meeting over to Doug Sarno, the Task Force's consultant. Sarno said the future use evaluation criteria developed by the Task Force several months ago needed to be reviewed, especially because a few will conflict.

After a great deal of discussion, the Task Force came to consensus on these values:

ENVIRONMENTAL VALUES

- Identify and preserve significant natural ecosystems with a special emphasis on:
  - naturally occurring wetlands
  - Paddys Run
  - threatened and endangered species
- Minimize impacts on the environment during remediation and maximize restoration of environment after remediation.
- Ensure that any waste left on-site be controlled to prevent further contamination of the Great Miami Aquifer, air and soils on and off-site.
- Any future site use must be protective of the environment.

SOCIAL AND HUMAN VALUES

Future uses must have a positive impact on the surrounding communities, including:

- Acceptable risks to the current and future residents and workers of the Fernald community with a special emphasis on the effects on children and future generations.
- Input and involvement from the public at large.
- Compatible with current and projected off-site uses.
- Demonstrating how a negative situation can be turned into a positive by not repeating the mistakes of the past which resulted in the current conditions at Fernald.

ECONOMIC VALUES

- Emphasis should be placed on future uses which provide some level of continuing employment for area residents, but not necessarily in categories that have traditionally been present at the site.
- Future uses and ownership should be structured so that local tax revenues or payments in lieu of taxes are provided.
- Where practical, infrastructure should be used to enhance the suitability of the property for future use subject to environmental and health values.

- The cleanup of the Fernald facility should be done in such a way as to reduce the stigma of past practices at the site and assist in the continuing use and development of surrounding properties.

LONG-TERM MANAGEMENT VALUES

- A long-term control mechanism for the site must be established to ensure the perpetual moral and financial responsibility of the Federal government for the continued management, monitoring, and emergency response capability regarding all wastes left on the facility.
- Long-term uses and institutional control mechanisms must be reconciled with local zoning and planning.
- All selected uses resulting in waste being left on site must have the built in flexibility to provide for future changes is use and better cleanups should financial, technical, or demographic changes warrant.
- A long-term mechanism must be established to ensure citizen involvement in the control, management, and future decisions at the site.

GENERAL USE VALUES

- Any future use plan must recognize that a mixed use strategy may be the most effective for the long-term use of the site.
- Emphasis should be placed on reducing the physical barriers and physical evidence of the past use of the site and focus on ways that Fernald can be a better neighbor to the surrounding community.
- Under no circumstances should a post-remediation future use be permitted at the facility which requires the importing of hazardous, radioactive, mixed or solid waste for any reason.
- All uses and cleanup plans for all waste, shipments, and treatments must explicitly recognize all political, safety and health impacts.
- Future uses of the site must be focused on non-hazardous activities.

7. Review of Alternative Future Uses:

Sarno provided an overview of the Toolbox, which was reorganized for the September meeting. The revised Toolbox includes information on the 21 future use scenarios developed by the Task Force. The 21 future use

scenarios developed for evaluation resulted from playing *FutureSite* and from developing scenarios that will protect the Great Miami Aquifer, a source of drinking water for the region. These scenarios will be evaluated and narrowed into a recommendation on future use.

(*FutureSite* is the Task Force's unique hands-on model. The exercise uses stacks of different colored chips to represent uranium-contaminated soil at the Fernald site. The different colors indicate varying concentrations and volumes of contaminated soil. The "game board" is a map of the site that is marked with a 1000-square-foot grid. The object of the exercise is to move chips into on- or off-site disposal bins to achieve the desired future use. Players then have an accurate idea of how much soil must be cleaned up to reach a certain land use. Players also tally the cost associated with moving chips to calculate the estimated cost of such a cleanup.)

Sarno explained that the volume of uranium-contaminated soil presents the most significant consideration for future use at Fernald. Therefore cleanup levels -- expressed in parts per million (ppm) -- were developed with the future use scenarios. (To provide a context, a part per million is roughly equivalent to one automobile in bumper-to-bumper traffic from Cleveland to San Francisco.) These cleanup levels are based on one of four land use categories or protection of the groundwater. The categories, the assumptions for each, and the cleanup levels are:

- Resident farmer; assumes full-time life-long resident growing crops for human consumption and grazing livestock; cleanup levels at 10^{-5} risk, 20 ppm; cleanup levels at 10^{-6} risk, 5 ppm
- Industrial; assume maximum exposure to an on-site groundskeeper; cleanup levels at 10^{-5} risk, 100 ppm; cleanup levels at 10^{-6} risk, 15 ppm
- Developed park; assume free access recreational facility with developed sports, picnic, and restroom facilities; cleanup levels at 10^{-5} risk, 430 ppm; cleanup levels at 10^{-6} risk, 50 ppm
- Green space; assumes unlimited access to nature trails, but with no developed facilities; cleanup levels at 10^{-5} risk, 1090 ppm; cleanup levels at 10^{-6} risk, 115 ppm
- Protection of aquifer; assumes soil concentrations required to prevent contamination from leaching into aquifer, and the site is divided into two zones according to geology and solubility; cleanup levels at 10^{-5} risk in Zone 1 is 20 ppm and in Zone 2 is 100 ppm; cleanup levels at 10^{-6} risk in Zone 1 is 5 ppm and in Zone 2 is 10 ppm

The future use scenarios mostly allow for a cleaner border around the Fernald facility. The options the Task Force initially developed are:

Scenario 1	Resident Border/Industrial Center at 10^{-5}
Scenario 1a	Resident Border/Industrial Center at 10^{-6}
Scenario 2	Resident Border/Park Center at 10^{-5}
Scenario 2a	Resident Border/Park Center at 10^{-6}
Scenario 3	Resident Border/Green Space Center at 10^{-5}
Scenario 3a	Resident Border/Green Space Center at 10^{-6}
Scenario 4	Industrial Border/Park Center at 10^{-5}
Scenario 4a	Industrial Border/Park Center at 10^{-6}
Scenario 5	Industrial Border/Green Space Center at 10^{-5}
Scenario 5a	Industrial Border/Green Space Center at 10^{-6}
Scenario 6	Park Border/Green Space Center at 10^{-5}
Scenario 6a	Park Border/Green Space Center at 10^{-6}
Scenario 7	Total Green Space at 10^{-5}
Scenario 7a	Total Green Space at 10^{-6}
Scenario 8	North Green Space/South Industrial at 10^{-5}
Scenario 8a	North Green Space/South Industrial at 10^{-6}
Scenario 9	Total Residential at 10^{-5}
Scenario 9a	Total Residential at 10^{-6}
Scenario 10	Protection of Aquifer at 10^{-5}
Scenario 10a	Protection of Aquifer and perched groundwater at 10^{-5}
Scenario 10b	Protection of Aquifer at 10^{-6}

The impact of soil uranium contamination on the concentrations of uranium in groundwater are critical to groundwater protection, Sarno said. If the goal is to protect the aquifer, then most land use options can be eliminated because the concentrations of uranium in the soil would not be low enough, he explained.

If the groundwater is to be protected, only four of the 21 future use scenarios are viable:

- Total Residential at 10^{-5}
- Resident Border/Industrial Center at 10^{-5}
- Total Industrial at 10^{-5}
- Total Residential at 10^{-6}

There was a great deal of discussion among Task Force members about whether future uses that do not protect the groundwater should even be considered. No decision was reached. Members of the public also participated in the discussion.

Sarno also introduced the Task Force's new tool for visualizing the impacts of various future use scenarios. A scale map of the Fernald site, indicating the major areas requiring cleanup, has been laminated onto a magnetic white board. Task Force members use the board to sketch in future use scenarios in order to see what parts of the site are affected. In addition, a series of magnetic figures have been prepared to represent different sizes of on-site disposal cell. These figures can be moved to different locations on the map to illustrate how much land would be taken by the disposal cell.

8. Opportunity for Public Participation:

There were no additional comments; public input was received during the review of the future use alternatives.

9. New Business:

Diane Holmes, Outreach Coordinator for FERMCO, provided an update on the Plant 7 Takedown, which was partially successful. She said the area around the building was secure and that officials were evaluating how to complete bringing down the structure.

10. Materials Distributed at Meeting:

- Revised Toolbox
- Handout on Current Status of Waste Disposition Drivers/Issues at Fernald

11. Next Meeting:

The next meeting of the full Task Force is scheduled for 8:30 a.m. to noon on October 8, 1994, at the AmeriSuites in Forest Park.

The meeting adjourned at 4:10 p.m.

Approved October 8, 1994